

IN THE SPECIFICATION

Please amend the specification as follows:

Page 1, paragraph 1:

This is a continuation-in-part of United States patent application serial no. 10/269,204 filed October 11, 2002, now abandoned which was a continuation-in-part of United States patent application serial no. 09/847,476 filed May 2, 2001, now US Patent No. 6,541,677, and United States patent application serial no. 10/098,759 filed March 14, 2002, now US Patent No. 6,770,174.

Page 11, 2nd full paragraph:

Further, the present invention entails a method for treating an industrial production process that emits a gaseous effluent stream containing ammonia, and comprises the following:

- a) oxidizing ammonia in the industrial effluent gas stream by direct photochemical oxidation in the absence of added photocatalyst by irradiating the gas stream with UV light after removal of particulate matter
- b) oxidizing ammonia in the industrial effluent gas stream by direct photochemical oxidation in the absence of added photocatalyst by irradiating the gas stream with UV light prior to the removal of particulate matter while the industrial gas stream is passing through the last stage of the SCR catalyst bed.

Page 16, last paragraph:

The combustion gas stream exiting the Stage I treatment area is directed to one or more heat exchangers **14** to remove sensible heat from the combustion gases. These heat ~~exchanger~~ exchangers can include feed water economizers and air preheaters. The cooled combustion gas stream then enters a high efficiency particulate matter control system **16** such as an electrostatic precipitator, reverse air fabric filter, or pulse jet fabric filter. Combustion gases with the substantially reduced particulate matter concentration enter an outlet manifold or duct **18** to transport the treated gas stream to a fan **23** and stack **24**.

Page 20, last section of text on page:

These reactions collectively result in a predictable pattern to NO, NO₂, ammonia, O₃, and byproduct concentration profiles. These concentration profiles existing in the photochemical process equipment are similar to the concentration profiles observed over much longer time periods in polluted air undergoing smog reactions. As indicated in Figure 3, as the irradiation time proceeds, NO is first converted to NO₂ due to a variety of reactions, especially 6 and 17. ~~NO₂~~ NO₂ photolysis is due to UV absorption. Carbon monoxide, water vapor, and hydrocarbons participate in this free radical chain

Page 22, last paragraph section:

Cyclones **106** and **108** are adapted to receive a conventional raw feed, typically limestone, and in some cases, additives such as clay and sand. The raw feed is typically directed through a feed line **114** into duct **112** carrying the gas stream from cyclone **108** to cyclone **106**. The raw feed entering duct **112** mixes with the gas stream and is directed into cyclone **106** and gravitates downward through cyclone **106** while

being preheated. The raw feed exits cyclone **106** through feed line **116**. Figure 2 depicts a feed a-line **116** that joins the gas stream duct **110**. There, the raw feed